

## **Closing of GLIF Winter 2011 meeting**

Gigi Karmous-Edwards
Gigi\_ke@ncsu.edu



- Campus networking Task Force -Ronald van der Pol (SARA)
  - Shared results of survey taken by several in the community (still awaiting more responses)
  - Agreed to get more involvement from campus network engineer (usually do not attend GLIF) – target as remote speakers



- Terena E2E provisioning workshop series Peter Szegedi (TERENA)
  - Interesting insights from three E2E workshops
  - Several other workshops are taking place at different locations around the world – Peter would like to bring many of these participants for one large workshop as possibly part of GLIF...



- E2E service architecture verification Jerry Sobieski (NORDUnet)
  - We need to develop an E2E service architecture
  - Must coordinate closely with NSI working group
  - Policy will be the most difficult aspect of the service to verify
  - Agreed to plan for a new task force and will be presented in Rio



- GOLE Governance Task Force discussion Bill St. Arnaud (SURFnet)
  - Agreed that GOLEs are lacking proper guidelines for interoperability today
  - This task force will NOT be used to oversee GOLE operations, but rather for preparing high level guidelines for the GOLE community
  - Bill will have another meeting at I2SMM and report take away at the Rio meeting.
  - In Rio the community will decide on the task force



#### **Successful Demonstration**

## GLIF Demonstrations - Automated-GOLE Pilot project activities

- Next generation Pinger over Fenius control plane
- Topology specification and distribution within the Automated GOLE environment targeted for SC 2011
- A few of the APAN attendees came to the Demo!
- TF will write end-to-end service architecture document for Rio



- OpenDRAC update John MacAuley (SURFnet)
  - Open Source Status
    - now running on CzechLight, CERNLight and soon KISTI
    - Updated simulation code
  - DRAC external interfaces
    - Start build NSI interface
    - Built a CLI and Java App (automation tool to help users)



- OGF NSI-WG update Inder Monga (ESnet)
  - Updated us on the accomplishments of the team over the last several months – which is a great deal!
  - Some questions on the "release command" vs. "unreserve"
  - State machines were presented as well as a few concepts such as Service Termination Point, and error handling
  - Next steps need task force for NSI reference implementation by GLIF meeting in Rio



- Update on Generic Network Interface Specifications (GNI-API) Task Force and Fenius - Evangelos Chaniotakis (ESnet)
  - Successfully completed the GNI-API Great work
     Evangelos and team!
  - Lessons learned document for Rio!
  - GNI API TF will officially close in Rio
  - Fenius will continue to be used for the NSI implementation
    - Maintain some key software
    - Implement NSI protocol
    - Need more developers form the community volunteering
    - Break down Fenius architecture for discussion in Rio GLIF Winter Meeting, Hong Kong 2011



## **NSI** Implementation

 NSI implementation and demonstration - open discussion, chaired by Gigi Karmous-Edwards (NCSU)

#### **Rough Time Lines and GOALs for NSI Implementation**

- 3/30/2011 Draft version 1 of NSI specification
- 9/13/2011 GLIF RIO deliverables
  - Service architecture document Dynamic GOLE TF
  - NSI implementation of the following calls from RA to PA for services for connection between A to B:
    - 1)reserve, 2) provision, 3) query, 4) cancel
  - Dynamic GOLE TF will have an end-to-end service architecture document.
  - May have a real usecase for the demo with CESnet (video), etc.

GLIF Winter Meeting, Hong Kong 2011



#### 11/12/2011 SC 2011

- Add the following services to the demonstration:
  - Focus only on Ethernet VLAN services
  - End-to-end independent verification

#### 01/22/2012 GLIF Winter in Baton Rouge

- Post mortem on development of SC 2012 demonstration.

03/30/2012 Final OGF Specification v. 1.0 completed

06/30/2012 NSI end-to-end services ver. 1 code complete

massive beta testing



## **NSI** Implementation

\*\*\*\*End of 2012 Service\*\*\*\*\*

Features ready for use by the community requesting a path from A to B:

- Ethernet VLAN services
- Policing
- Performance
- Scheduling
- Independent end-to-end data plane checking
- Fully automated authorization and access
- Fully automated path request and service

GLIF Winter Meeting, Hong Kong 2011



- Introduction to LHC Open Network Environment (LHCONE) - Artur Barczyk (USLHCnet)
- Experiments are changing data models to T2 to any-T1 & T2-T2 data flows
- LHCONE designed to offload general R&E Networks
- LHCONE is designed as the companion to LHCOPN
- Dedicated to T1 T2 T3 data flows
- Open design, other science disciplines could also created their Open Network Environments



- Distributed Topology Exchange Task Force Jeroen van der Ham (UvA)
- Jeroen will provide a tool for topology editing ... he will send the url for the tool on the mailing list
- In two weeks there will be a DTOX TF conf call and a timeline for collecting all simplified GOLE topology will be agreed to



 Resource Allocation Task Force - Gigi Karmous-Edwards (NCSU)

 Ask GLIF Application working group if they could create a task force





 Showcase: Troubleshooting connectivity problems with 802.1ag by end-users - Ronald van der Pol (SARA)



# Thank You! Safe travels back home!

Gigi Karmous-Edwards
Gigi\_ke@ncsu.edu